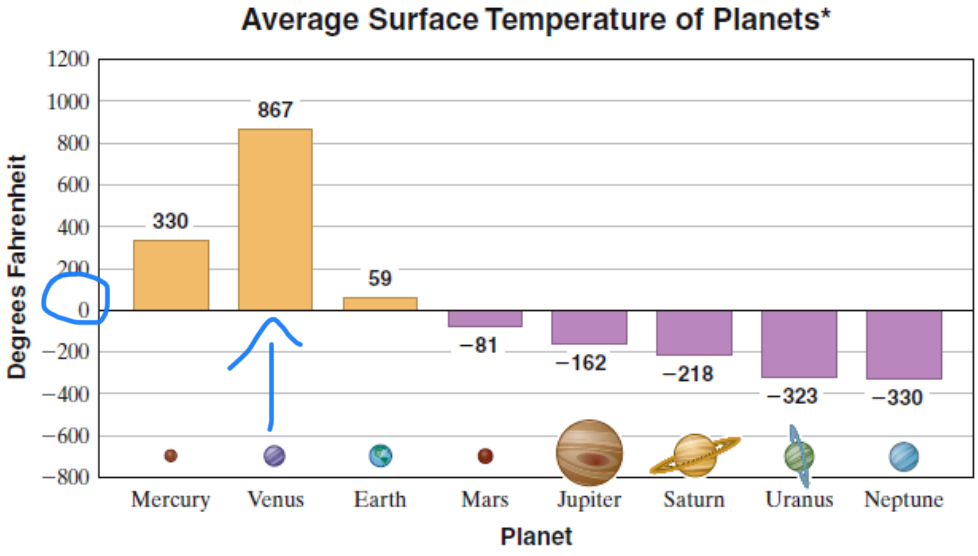
2.1 Objective F: Read Bar Graphs Containing Integers.



Source: The World Almanac, 2009
* For some planets, the temperature given is the temperature where the atmospheric pressure equals 1 Earth atmosphere.

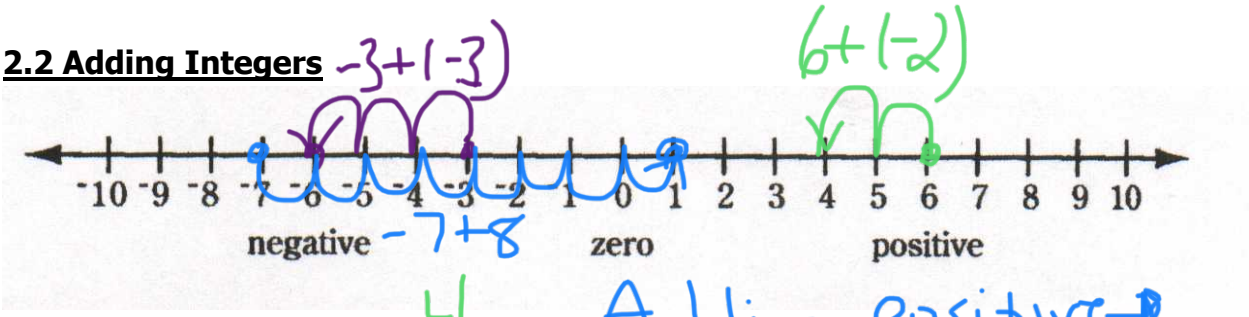
Ex 6. Use the bar graph to answer the question.

- Which planet has the highest average daytime surface temperature?

Venus

Group Review: pg. 104 #2, 20, 24, 30, 48, 52, 56, 88, 90

2.2 Adding Integers



Ex. 1. $6 + (-2) =$ 4

Ex. 2. $-3 + (-3) =$ -6

Ex. 3. $-7 + 8 =$ 1

Adding positive →

Adding negative ←

2.2 Objective A: Add Integers.

Adding Two Numbers with the **Same Sign**
Step 1: Add their absolute values.
Step 2: Use their common sign.

Ex. 4. Add.

+ $5 + 6 =$ 11

− $-5 + (-6) =$ -11

− $-13 + (-8) =$ -21

13
+ 8

Adding Two Numbers with **Different Signs**
Step 1: Find the bigger absolute value minus the smaller absolute value.
Step 2: Use the sign of the number with the larger absolute value as the sign of the sum.

Ex. 5. Add.

$-23 + 17 =$ -6 23−17=6

$-32 + 32 =$ 0 32−32=0

$40 + (-26) =$ 14 40−26=14

3 40
−26
14

2.2 Objective B: Evaluate an Algebraic Expression by Adding.

substitute (in parentheses)

Ex. 6. Evaluate $3x + 2y$ for

A) $x = 2$ and $y = -10$

$3(2)+2(-10)$

$2+2+2+(-10)+(-10)=-14$

B) $x = -7$ and $y = 7$

-7

Ex. 7. Evaluate $10x + y$ for

A) $x = 5$ and $y = -2$

48

B) $x = -6$ and $y = -15$

-75

2.2 Objective C: Solve Problems by Adding Integers.

Translate each phrase; then simplify

Ex. 8. addition

- Find the sum of -6 and 25.

$-6+25=19$

- Find the sum of -31, -9 and 30

$-31+(-9)+30=-10$

$-31+(-9)$
$=-40$

$-40+30$
$=-10$

Ex. 9. Suppose a deep-sea diver dives from the surface to 215 feet below the surface. He then dives down 16 more feet. Use positive and negative numbers to represent this situation. Then find the diver's present depth.

starting → $0 + \underline{-215} + \underline{-16} = \underline{-231}$

231 feet below the surface.

$215 + 16 = 231$

Group Review: pg. 114 #46, 50, 54, 55, 62, 68, 74